

Title (en)

METHOD AND DEVICE FOR CONVERTING VIRTUAL VIEW INTO STEREOGRAPHIC VIEW

Title (de)

VERFAHREN UND VORRICHTUNG ZUR UMWANDLUNG EINER VIRTUELLEN ANSICHT IN EINE STEREOSKOPISCHE ANSICHT

Title (fr)

PROCÉDÉ ET DISPOSITIF DESTINÉS À CONVERTIR UNE VUE VIRTUELLE EN UNE VUE STÉRÉOSCOPIQUE

Publication

EP 3067866 A1 20160914 (EN)

Application

EP 14814675 A 20140723

Priority

- CN 201310542642 A 20131105
- CN 2014082831 W 20140723

Abstract (en)

A method and an apparatus for achieving transformation of a virtual view into a 3D view are provided. The method comprises the following steps of: S1. capturing position coordinates of a human eye by a human-eye tracking module; S2. determining a rotation angle of a virtual scene according to the position coordinates of the human eye and coordinates of a center of a screen of a projection displaying module and rotating the virtual scene according to the rotation angle to obtain a virtual holographic 3D view matrix by a first image processing module; S3. determining a shearing angle for each of viewpoints according to coordinates of a center of the virtual scene, position coordinates of a viewer in the scene and coordinates of the viewpoints to generate a shearing matrix for the viewpoint in one-to-one correspondence, and post-multiplying the shearing matrix with a corresponding viewpoint model matrix to generate a left view and a right view by a second image processing module; and S4. projecting the left view and the right view of each of the viewpoints by the projection displaying module. In this way, the method and the apparatus for achieving transformation of a virtual view into a 3D view according to the present disclosure can achieve the purpose of holographic 3D displaying.

IPC 8 full level

G06T 15/00 (2011.01); **H04N 13/363** (2018.01)

CPC (source: EP US)

G03H 1/08 (2013.01 - US); **G06T 3/60** (2013.01 - EP US); **G06T 15/20** (2013.01 - US); **G06T 19/006** (2013.01 - US);
H04N 13/279 (2018.04 - EP US); **H04N 13/363** (2018.04 - EP US); **H04N 13/383** (2018.04 - US)

Cited by

CN114339194A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2015339844 A1 20151126; US 9704287 B2 20170711; CN 103996215 A 20140820; EP 3067866 A1 20160914; EP 3067866 A4 20170329;
JP 2015536010 A 20151217; WO 2015067071 A1 20150514

DOCDB simple family (application)

US 201414417557 A 20140723; CN 201310542642 A 20131105; CN 2014082831 W 20140723; EP 14814675 A 20140723;
JP 2015545662 A 20140723